

## **ABSTRACT**

### **BACKLIGHTING SYSTEM FOR DISPLAY SCREEN**

A circuit board (14) on which the electronic components (2,3) providing power to a  
5 series of light sources (5) is positioned as near as possible to light sources in order to  
minimise parasitic energy losses which would be introduced by lengths of wiring. The  
light sources (5) are usually elongate tubular Cold Cathode Fluorescent Tubes  
arranged parallel to one another in a single plane and the circuit board (14) may be  
mounted directly over the light sources, towards one end of the tubes. Standard PCB  
10 board-to-board connectors (12) may be provided at an edge of the circuit board (14)  
and a further circuit board (10) provided with a series of conductive tracks may  
provide both a mechanical and electrical connection between the circuit board (14)  
and the light sources (5). A power distribution method is also disclosed in which both  
current and temperature of the light sources are monitored and regulated in order to  
15 extend the lifetime of the light sources (5) and to stabilise their brightness.

(Figure 1a)